



Orange County and the Towns of Gordonsville and Orange

Water Source Overview

Major sources include the Rapidan River, purchased water, and groundwater wells.

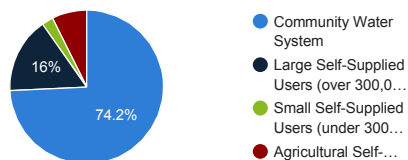
***Table 1:** Reported (2010) and projected (2040) water use by system type for Orange County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	1.363	3.697
Large Self-Supplied Users (over 300,000 gal/month)	0.294	0.506
Small Self-Supplied Users (under 300,000 gal/month)	0.044	0.077
Agricultural Self-Supplied Users	0.135	0.191

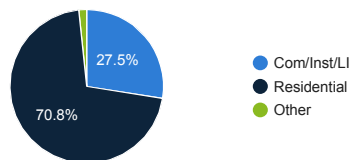
Water Use by System Type

Approximately 17,280 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

***Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



***Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



***Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Orange County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
0.50	1.34	0.83	3.64

***Figure 3:** Orange County highlighted in the Commonwealth of Virginia



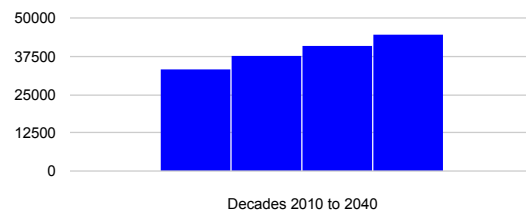
Projected Water Demand

Population and demand are projected to increase through the planning period. Possible alternatives include increasing the existing, permitted surface water withdrawal, developing new raw water storage, and developing new groundwater supplies.

***Table 3:** Orange County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

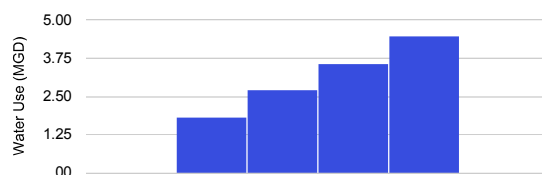
2010	2020	2030	2040	% Change (2010-2040)
33,481	37,648	41,207	44,662	33.3%

***Figure 4:** Orange County population projections by decade for 2010, 2020, 2030 & 2040



***Table 4 & Figure 5:** Orange County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
1.84	2.71	3.59	4.47	143.5%



Drought Management Practices

Enforcement of the Drought Response and Contingency Plan is addressed through ordinances that apply to the Towns and the Rapidan Service Authority. (Orange County Regional WSP)